

## Air pollution and asthma

Air pollution can affect your asthma in different ways.

You may find that air pollution, such as fumes from cars, can make your asthma worse, making it more likely for you to have an asthma attack.

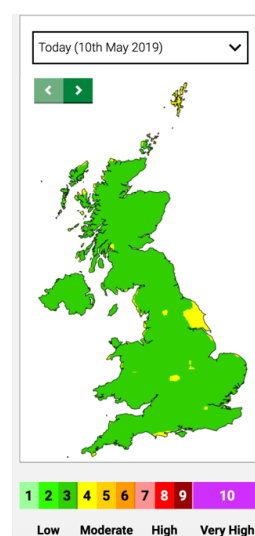
Air pollution can also make you more sensitive to your triggers, such as pollen or exercise, making them more likely to cause an asthma attack.

There are long-term effects too; exposure to air pollution at a young age is thought to contribute to the development of asthma in later childhood.

If you have asthma, it's important to be aware of air pollution levels and know what to do if the levels are high.

The British Thoracic Society recommend using the DEFRA air quality forecast to check the air quality in a specific area. There is also useful advice on what to do if the air pollution level is higher than normal, for example reducing the amount of strenuous activity you do that day or walking to school by a different route to help prevent bringing on asthma symptoms.

<https://uk-air.defra.gov.uk/>



## DEFRA Recommended Actions and Health Advice

Air Pollution Banding	Value	Accompanying health messages for at-risk individuals*	Accompanying health messages for the general population
<b>Low</b>	<b>1-3</b>	<b>Enjoy</b> your usual outdoor activities.	<b>Enjoy</b> your usual outdoor activities.
<b>Moderate</b>	<b>4-6</b>	Adults and children with lung problems, and adults with heart problems, <b>who experience symptoms</b> , should <b>consider reducing</b> strenuous physical activity, particularly outdoors.	<b>Enjoy</b> your usual outdoor activities.
<b>High</b>	<b>7-9</b>	Adults and children with lung problems, and adults with heart problems, should <b>reduce</b> strenuous physical exertion, particularly outdoors, and particularly if they experience symptoms. People with asthma may find they need to use their reliever inhaler more often. Older people should also <b>reduce</b> physical exertion.	Anyone experiencing discomfort such as sore eyes, cough or sore throat should <b>consider reducing</b> activity, particularly outdoors.
<b>Very High</b>	<b>10</b>	Adults and children with lung problems, adults with heart problems, and older people, should <b>avoid</b> strenuous physical activity. People with asthma may find they need to use their reliever inhaler more often.	<b>Reduce</b> physical exertion, particularly outdoors, especially if you experience symptoms such as cough or sore throat.



## References:

DEFRA air quality forecast, (2019). UK air information resource [online] available at <https://uk-air.defra.gov.uk/> [accessed 17/4/19]

BTS/SIGN British Guideline on the Management of Asthma, (2016). BTS/SIGN British Guideline on the Management of Asthma [online] available at <https://www.brit-thoracic.org.uk/quality-improvement/guidelines/asthma/> [accessed 17/4/19]

McConnell et al. (2010). Childhood Incident Asthma and Traffic-Related Air Pollution at Home and School. *Environmental health perspectives* [online] Volume 118, available at <https://ehp.niehs.nih.gov/doi/10.1289/ehp.0901232> [accessed 17/4/19]